Federal Aviation Administration
Research, Engineering & Development
FY 2003 Senate Mark

Budget Request $124,000,000 (Excludes CSRS/FEHB accruals)

Senate Recommendation $124,000,000
Difference (+/- Request) $ 0

House Recommendation
Difference (+/- Request)

Conference Mark

Appropriations and Obligations Limitations

Research Engineering & Development
By FAA Goal FY 2002 - 2003

		Enacted FY 2002 Total	Pres. Request FY 2003 Total	Senate Mark FY 2003 Total	House Mark FY 2003 Total	Conf. Mark FY 2003 Total
A11	**Improve Aviation Safety**	**$ 102,186,000**	**$ 101,423,000**	**$ 103,423,000**	**$ -**	**$ -**
	Reduce Commercial Aviation Safety	**$ 53,469,000**	**$ 46,207,000**	**$ 48,207,000**	**$ -**	**$ -**
	a. Fire Research & Safety	$ 5,242,000	$ 6,429,000	$ 6,429,000		
	b. Propulsion & Fuel System	$ 5,998,000	$ 3,998,000	$ 4,998,000		
	c. Advance Maerials/Structural Safety	$ 1,338,000	$ 1,374,000	$ 1,374,000		
	d. Flight Safety/Athmospheric Hazards Research	$ 4,494,000	$ 3,101,000	$ 4,101,000		
	e. Aging Aircraft	$ 25,600,000	$ 20,974,000	$ 20,974,000		
	f. Aircraft Catastrophic Failure Prevention Research Flightdeck/Maintenance/System Integration	$ 2,794,000	$ 1,920,000	$ 1,920,000		
	g. Human Factors	$ 8,003,000	$ 8,411,000	$ 8,411,000		
	Reduce General Aviation Safety	**$ 14,435,000**	**$ 11,964,000**	**$ 11,964,000**	**$ -**	**$ -**
	b. Propulsion & Fuel System	$ 2,570,000	$ 1,713,000	$ 1,713,000		
	c. Advance Maerials/Structural Safety	$ 1,636,000	$ 1,679,000	$ 1,679,000		
	d. Flight Safety/Athmospheric Hazards Research	$ 1,926,000	$ 1,329,000	$ 1,329,000		
	e. Aging Aircraft	$ 6,400,000	$ 5,243,000	$ 5,243,000		
	Flightdeck/Maintenance/System Integration					
	g. Human Factors	$ 1,903,000	$ 2,000,000	$ 2,000,000		
	Safety - Other	**$ 34,282,000**	**$ 43,252,000**	**$ 43,252,000**	**$ -**	**$ -**
	h. AviationSafety Risk Analysis	$ 5,784,000	$ 6,926,000	$ 6,926,000		
	I. Air Traffic Control Aiway Facilities Human Factors	$ 8,500,000	$ 10,317,000	$ 10,317,000		
	j. Aeromedical Research	$ 6,121,000	$ 6,603,000	$ 6,603,000		
	k. Weather Program - Safety	$ 13,877,000	$ 19,406,000	$ 19,406,000		
A12	**Imporove Efficiency of Air Traffic Control System**	**$ 9,791,000**	**$ 9,099,000**	**$ 12,099,000**	**$ -**	**$ -**
	a. Weather Program - Efficiency	$ 9,791,000	$ 9,099,000	$ 12,099,000		
A13	**Reduce Environment Impact of Aviation**	**$ 22,081,000**	**$ 7,698,000**	**$ 2,698,000**	**$ -**	**$ -**
	a. Environment & Energy	$ 22,081,000	$ 7,698,000	$ 2,698,000		
A14	**Improve Efficiency of Mission Support**	**$ 13,850,000**	**$ 8,524,000**	**$ 8,524,000**	**$ -**	**$ -**
	a. System Planning and Resource Management	$ 1,200,000	$ 1,459,000	$ 1,459,000		
	William J. Hughes Technical Center Laboratory					
	b. Facility	$ 12,250,000	$ 6,455,000	$ 6,455,000		
	c. Strategic Partnerships	$ 400,000	$ 610,000	$ 610,000		
	Security	**$ 47,092,000**				
	Information Security	$ 2,581,000				
	Explosives and Weapons Detection	$ 32,624,000				
	Airport Security Technology Integration	$ 2,084,000				
	Aviation Security Human Factors	$ 5,163,000				
	Aircraft Hardening	$ 4,640,000				
	Acountwide Adjustment CSRS/FEHB		$ (2,744,000)	$ (2,744,000)		
	Total	**$ 195,000,000**	**$ 124,000,000**	**$ 124,000,000**	**$ -**	**$ -**

FY 2003 Senate Mark

Major Highlights:

R,E&D

Does not include the CSRS/FEHB accruals.

Propulsion and Fuel Systems – "Within the funds provided the Committee includes $1,000,000 to continue the activities of the specialty metals processing consortium and $1,000,000 for additional research into the performance and combustion characteristics of aviation grade ethanol fuels."

Flight Safety/atmospheric hazards research – "…including $3,000,000 for flight safety/atmospheric hazards research to continue the development of in-flight simulator training for civilian and commercial pilots at the Roswell Industrial Center."

Aging aircraft – "The Committee has provided resources to continue the collaborative efforts between the FAA and several public and private organizations including the Center for Aviation Systems Reliability (CASR), the Airworthiness Assurance Center of Excellence (AACE) and the Engine Titanium Consortium (ETC)."

$3,500,000 for the Center for Aviation Systems Reliability (CASR)
$4,000,000 for Airworthiness Assurance Center of Excellence (AACE)
$3,000,000 for Engine Titanium Consortium (ETC)
$3,000,000 for the Aging Aircraft Nondestructive Inspection Validation center (AANC)
$2,500,000 for the Center for Aviation Research and Aerospace (CARAT)":

Anomalous flight monitor - "With in the funds provided, the Committee includes $3,000,000 to develop a pilot project at Seattle-Tacoma International Airport to create a system that integrates and leverages the capabilities of mobile software objects to monitor and understand current air traffic operations and to sense the "state" of an aircraft for anomalous flight conditions."

Weather research safety – "…includes $5,000,000 to continue research to identify wake turbulence by utilizing pulsed laser Doppler radar technology."

Weather research efficiency - …includes $5,000,000 for wake turbulence research to expedite the development of new standards and procedures."

Environment and energy – "The Committee provides $2,698,000 for environment and energy research, a reduction of $5,000,000 due to budget constraints."

F&E

Advanced Technology Development & Prototyping – "The Committee provides $41,600,000 for the advanced development and prototyping program which is $500,000 more than the President's budget request. The Committee is aware of a potentially cost effective technology called the Runway Obstruction Warning System (ROWS). The Committee has included $500,000 to further test and develop this technology at the Gulfport-Biloxi Airport. Also included within the funds provided is $2,000,000 for the airfield improvement program authorized under section 905 of Public Law 106-181. The recommended funding level includes $5,500,000 to continue the wind profiling and weather research activities at Juneau, Alaska."

Safe Flight 21 – "The Committee recommends $32,800,000 for Safe Flight 21, which is $3,000,000 more than the budget request. The Committee is encouraged by the success of the Capstone initiative and has provided additional funding to accelerate deployment of the Capstone infrastructure in Southeastern Alaska. The Committee is continues to believe that Safe Flight 21

technologies show promise of reducing runway incursions. As the program proceeds attention should be given to how this program could promote safer ground traffic at airports and how ADS-B and other technologies could be used to address the runway incursion problem."

Free flight phase two – " The Committee recommendation includes $96,200,000 for Free Flight Phase II activities. The recommendation is $26,300,000 more than fiscal year 2002 enacted leels and $10,000,000 less than the budget estimate. Within the available funds, the Committee has provided full funding for the User Request Evaluation Tool (URET)."